

ABSTRACT

A constant voltage/constant power AC adapter converts AC voltage to DC voltage to provide power to a plurality of loads. The adapter's output characteristic is approximately a constant voltage as long as the output current draw by the loads is less than a threshold (*e.g.*, a safety threshold for the adapter). If, however, the power draw on the adapter is such that the output current exceeds the threshold, the adapter then decreases its output voltage to maintain the power draw at a safe level. One or more loads that draw power from the adapter may be adapted to detect a drop in the AC adapter's output voltage. When such a voltage drop is detected, that information tells the load that too much current is being drawn from the adapter and that the load should throttle back (*e.g.*, reducing battery charge current, CPU clock frequency, display brightness, etc.).